



INSPECTION REPORT: KENSINGTON GOLD MINE

Tongass National Forest Minerals Group
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Date of Inspection: Wednesday October 16, 2019
Date of Report: Wednesday October 23, 2019
USDA Forest Service Inspector: Richard Dudek

Ranger District: Juneau Ranger District

Weather Conditions: Cloudy with a light rain. Temperature: high 40's °F.

Exploration in accordance with operating plan	Not Applicable
Timber removal following timber sale contract	Not Applicable
BMPs for erosion control	Satisfactory
Water Quality BMPs	Satisfactory
Public safety & fire prevention	Satisfactory
Reclamation work adequate and timely	Satisfactory
Roads maintenance adequate and current	Satisfactory
Tails placement in accordance with plan	Satisfactory
Waste Rock placement in compliance	Satisfactory
Company supervision of operation	Satisfactory
Operating in a clean and orderly manner	Satisfactory

Any conditions noted as UNSATISFACTORY will require follow up action by the Mine Inspector and a written memorandum to the operator, outlining the necessary work.

NEW REMARKS

Ward Air provided (Cessna 206) transportation to and from site.

Kevin Eppers (Sr. Environmental Manager, Coeur Alaska) accompanied Richard Dudek (Geologist, USFS).

This inspection included the Access roads, Comet Development Pile, Comet Water Treatment Plant (CTWP), Sherman Creek Outfall 001, Comet Bridges, Kensington warehouse pond, the avalanche pond, the water bar ponds, Pit 4, mud dump, the Bridge 1 ponds, the TTF area, and the fuel depot.

ACTION ITEMS:

- **No new action items were observed during this inspection.**

NOTEWORTHY ITEMS: Contractors were recently onsite collecting soil samples from where the decommissioned generators were located. Coeur is now waiting for the results to determine if the soils are contaminated.

ACCESS ROADS

During the inspection, the access roads were in good condition (2016 BMP Plan; Table 4-4).

COMET DEVELOPMENT PILE

Waste rock from the Raven drift is currently being deposited at this location (Photo 1).



COMET WATER TREATMENT PLANT (CWTP)

On 10/16/2019, the CWTP was treating 1,540 gallons per minute (gpm). The silts curtains were restaged to help localize sediments discharging into pond 1 (Photo 2). Pond 2 was receiving back wash from the treatment plant (Photo 3).

There was no white material observed on the clean test rock used for monitoring its accumulation (Photo 4). The Comet water treatment plant operators continue to use calcium chloride (CaCl_2) to help remove white material out of solution.

SHERMAN CREEK OUTFALL

White material was observed on rocks throughout the creek bed (Photos 5-6).

COMET ACCESS ROAD BRIDGES

New silt fencing has been installed along the abutments of both bridges (Photos 7-10).

WAREHOUSE POND

The settling pond at this location was working as intended (Photo 11).

AVALANCHE POND

The settling pond for this location is functioning as intended (Photo 12).

WATER BAR PONDS

All three ponds were working as intended (Photos 13-14).

PIT 4

Coeur personnel continue to use the graphitic phyllite (GP) stockpile (Photo 15) staged at pit 4 for GP/cement underground backfill. The year to date for GP/cement mix is approximately 12,100 tons. Some waste rock from this location (Photo 16) is currently being relocated to Pit 1 (Photo 17) for a construction contractor. The contractor will eventually ship the material offsite.

MUD DUMP GP STOCKPILE

Surface Operations recently placed an additional HDPE liner over the original liner because stormwater was able to get underneath the first liner (Photo 18). The stormwater was pumped out prior to the new liner being placed over the stockpile (Photo 19).

BRIDGE 1

A small tire needs to be removed from the base of the second settling pond (Photo 20). Sections of the secondary silt fencing needs to be repaired and/or replaced. The maintenance for silt fencing is to repair the deficiencies (i.e. sagging, torn, punctured fabric) immediately (Appendix 4g; page C-12).

TAILINGS TREATMENT FACILITY (TTF) AREA

The TTF's recorded water level on 10/16/2019 was 706.1 feet (Photo 21). The tailings barge has been moved central area of the TTF.

The five corrective actions taken to mitigate the acid rock drainage (ARD) in the dam spillway (Photo 22) are as follows:

1. Coeur Alaska personnel enlarged the ARD seepage conveyance ditch to the ARD seepage collection sump.



2. Coeur Alaska personnel installed four 4" x 6" boards on top of the wall. The bottom of the boards were sealed to prevent ARD from seeping underneath and/or around the boards.
3. The four boards were cemented to create an improved curb to help prevent ARD from flowing into the spillway.
4. The ARD stained wall was covered with cement for visually identifying future ARD seepage.
5. An HDPE liner above the cut slope was reestablished to divert stormwater away from the cut slope and minimized the potential for ARD generation.

Below the dam, Coeur Alaska personnel are in the process of constructing a roof over the dam pump back station (Photo 23).

The dam spillway and the effluent spillway were functioning as intended (Photos 24-25).

No ARD plumes were observed in the northern TTF area (Photo 26).

The TTF water treatment plant had a net discharge of 835-gpm. The treatment plant was discharging approximately 315-gpm to the effluent spillway, and the withdrawal rate from the Upper Slate Lake (USL) bypass was 520-gpm. The seep plant was not online during this inspection.

"Good housekeeping" practices were observed at the TTF water treatment plant ((Photo 27) (Appendix 4g BMP Plan; Table 4-1)).

FUEL DEPOT

The fuel depot was tidy and in order (Photos 28-31). There were no spills or fuel sheen observed at this location.

FOLLOW UP ITEMS

- Inspect the access roads.
- Inspect the Comet water treatment plant and settling ponds.
- Inspect for white material in Sherman Creek.
- Inspect the TTF area.

PHOTOS (Additional photos available upon request)



Photo 1. Comet development pile.

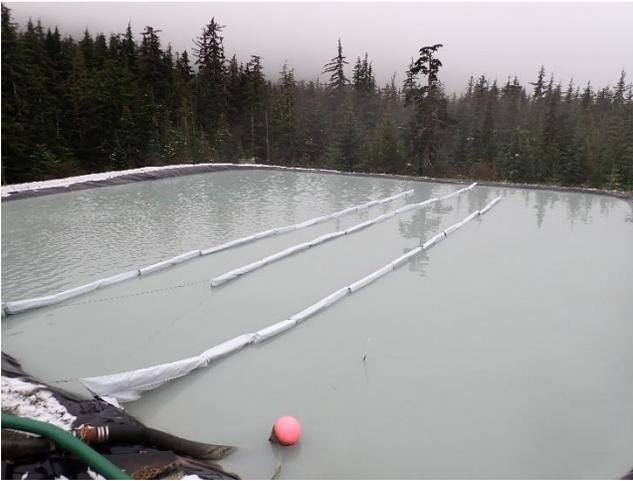


Photo 2. Pond 1.



Photo 3. Pond 2



Photo 4. The white material test rock.



Photo 5. White material was observed adhering to rocks in the creek bed.



Figure 6. White material adsorbing to rocks.



Photo 7. No Name Creek Bridge.



Photo 8. Silt fencing restaged along the bridge abutment.



Photo 9. Sherman Creek Bridge.



Photo 10. Silt fencing is in place to prevent debris from entering the stream.



Photo 11. The warehouse settling pond.



Photo 12. The avalanche pond.



Photo 13. The water bar settling ponds.



Photo 14. The lower water bar settling pond.



Photo 15. The GP stockpile currently being used for the GP/cement mix.



Photo 16. Waste rock staged at Pit 4.



Photo 17. Waste rock from Pit 4 is being staged at Pit 1 for a construction contractor.



Figure 18. The mud dump HDPE lined GP stockpile.



Photo 19. The south-west section of the GP stockpile where stormwater had accumulated.



Photo 20. A small tire needs to be removed and the secondary silt fencing needs to be repaired.



Photo 21. The TTF or Lower Slate Lake.



Photo 22. The south-west side of the TTF dam spillway.



Photo 23. Coeur personnel have started construction for roof over the dam pump back station.



Photo 24. The TTF dam spillway.



Photo 25. The TTF effluent spillway.



Photo 26. The northern TTF area.



Photo 27. The TTF water treatment plant.



Photo 28. The fuel depot skiff is now covered.



Photo 29. Concrete refueling station.



Photo 30. The fuel depot tanks 1, 2 and 3.



Photo 31. The fuel depot tanks 6 and 7.

Thanks to Kensington Mine for a safe visit.
U.S. Forest Service Officer: /s/ Richard Dudek
